ABSTRACT

The present invention provides a novel class of transcriptional corepressor polypeptides having an amino acid sequence which comprises at least one LXXLL nuclear receptor interacting NR box motif wherein L is leucine and X is any amino acid residue, and which are operably interactable with a nuclear receptor to actively repress transcription of DNA. The corepressor is widely expressed in fetal and adult tissues and attenuates agonist-activated nuclear receptor signaling by multiple mechanisms. Also provided are methods and uses for the novel class of transcriptional corepressors to repressing transcription in a cell.